

TITLE 327 WATER POLLUTION CONTROL BOARD

IDEM'S SUGGESTED CHANGES TO PROPOSED NEW RULES CONCERNING CONFINED FEEDING OPERATIONS AT 327 IAC 19

LSA Document #09-615

Revisions made by LSA under the Administrative Rules Drafting Manual (IC 4-22-8-4(a)(2)) and incorporated into the version posted in the Indiana Register on August 3, 2011 (DIN: 20110803-IR-327090213PRA) have been made in the version of this rule presented to the board for final adoption. These changes are NOT listed in this list of suggested changes.

Page references are to the proposed rule as posted in the Indiana Register.

1. 327 IAC 19-2-17

Delete "310 IAC 6" and substitute "**312 IAC 10**".

2. 327 IAC 19-2-21

Revise the section to read as follows:

327 IAC 19-2-21 "Historic site" defined

Authority: IC 13-14-8-7; IC 13-15-2-1; IC 13-18-10-4

Affected: IC 13-11-2; IC 13-14; IC 13-15; IC 13-18; IC 13-30; IC 14-8-2-125

Sec. 21. "Historic site", as defined in IC 14-8-2-125, means a site that is important to the general, archeological, agricultural, economic, social, political, architectural, industrial, or cultural history of Indiana. The term includes adjacent property that is necessary for the preservation or restoration of the site. (*Water Pollution Control Board; 327 IAC 19-2-21*)

3. 327 IAC 19-2-25

Revise the section to read as follows:

327 IAC 19-2-25 "Manure" defined

Authority: IC 13-14-8-7; IC 13-15-2-1; IC 13-18-10-4

Affected: IC 13-11-2; IC 13-14; IC 13-15; IC 13-18; IC 13-30

Sec. 25. "Manure", as defined in IC 13-11-2-126.5, means the following:

(1) Liquid or solid animal excreta.

(2) Waste liquid generated at a livestock or poultry production area, including the following:

(A) Excess drinking water.

(B) Cleanup water.

(C) Contaminated livestock truck or trailer washwater.

(D) Milking parlor wastewater.

(E) Milk house washwater.

(F) Egg washwater.

(G) Silage leachate.

(3) Any precipitation or surface water that has come into contact with the following:

(A) Liquid or solid animal excreta.

(B) Used bedding.

(C) Litter.

(D) Liquid described in subdivision (4).

(4) Any other materials generated at a livestock or poultry production area commingled with the materials listed in subdivisions (1) through (3).

(Water Pollution Control Board; 327 IAC 19-2-25)

4. **327 IAC 19-2-27**

Add a new section 27 to read as follows:

327 IAC 19-2-27 "Manure release" defined

Authority: IC 13-14-8-7; IC 13-15-2-1; IC 13-18-10-4

Affected: IC 13-11-2; IC 13-14; IC 13-15; IC 13-18; IC 13-30

Sec. 27. "Manure release" means any unexpected, unintended, abnormal, or unapproved dumping, leakage, drainage, seepage, discharge or other loss of manure outside of an approved waste management system and not in compliance with 327 IAC 19-14. *(Water Pollution Control Board; 327 IAC 19-2-27)*

5. **327 IAC 19-2-31**

Renumber the section as 327 IAC 19-2-32 and revise to read as follows:

327 IAC 19-2-32 "Owner/operator" defined

Authority: IC 13-14-8-7; IC 13-15-2-1; IC 13-18-10-4

Affected: IC 13-11-2; IC 13-14; IC 13-15; IC 13-18; IC 13-30

Sec. 32. "Owner/operator" means the person:

(1) that owns the waste management systems at the CFO;

(2) that:

(A) owns the livestock at the CFO; and

(B) applies for or has received an approval under this article; or

(3) in direct or responsible charge or control of one (1) or more CFOs or land application activity.

(Water Pollution Control Board; 327 IAC 19-2-32)

6. **327 IAC 19-2-32**

Renumber the section as 327 IAC 19-2-33 and revise to read as follows:

327 IAC 19-2-33 "Process wastewater" defined

Authority: IC 13-14-8; IC 13-14-9; IC 13-15-1-2; IC 13-15-2-1; IC 13-18-3

Affected: IC 13-11-2; IC 13-18-4

Sec. 33. (a) "Process wastewater" means water directly or indirectly used in the operation of the AFO for any or all of the following:

(1) Spillage or overflow from animal or poultry watering systems.

(2) Washing, cleaning, or flushing any of the following:

(A) Pens.

(B) Barns.

(C) Manure pits.

(D) Other AFO facilities.

(3) Direct contact swimming, washing, or spray cooling of animals.

(4) Dust control at the production area.

(b) The term includes any water that comes into contact with or is a constituent of any raw materials, products, or byproducts, including the following:

- (1) Manure.
- (2) Litter.
- (3) Feed.
- (4) Milk.
- (5) Eggs.
- (6) Bedding.

(Water Pollution Control Board; 327 IAC 19-2-33)

- 7. **327 IAC 19-2-37**
Renumber the section as 327 IAC 19-2-38.
Delete “so soaked with moisture” and “it”.
- 8. **327 IAC 19-2-44**
Renumber the section as 327 IAC 19-2-45.
Delete “water” and substitute “**waters**”.
- 9. **327 IAC 19-2-47**
Delete the definition of “waste liquid” in section 47.
- 10. **327 IAC 19-2-48**
In clause (3)(B), following “system;” insert “**or**”.
- 11. Following the changes to the definitions, renumber all sections appropriately.
- 12. **327 IAC 19-3-1**
Revise subsection (e) to read as follows:
 - (e) **Manure must be staged in such a manner as to:**
 - (1) **not threaten or enter waters of the state;**
 - (2) **prevent:**
 - (A) **runoff;**
 - (B) **manure releases; and**
 - (C) **spills.**
Add a new subsection (f) to read as follows:
 - (f) **Manure must be applied in such a manner as to:**
 - (1) **not threaten or enter waters of the state;**
 - (2) **prevent:**
 - (A) **ponding for more than twenty four (24) hours;**
 - (B) **manure releases; and**
 - (C) **spills; and**
 - (3) **minimize nutrient leaching beyond the root zone.**
- 13. **327 IAC 19-4-1(b)(5)**
Delete “327 IAC 19-2-31” and substitute “**327 IAC 19-2-32**”.
- 14. **327 IAC 19-4-1(c)**
Revise subsection (c) to read as follows:

(c) If determined to be necessary to protect human health or the environment, the commissioner may require additional protective measures, such as:

- (1) alternate design standards;
- (2) alternate operational requirements; or
- (3) use of a registered professional engineer.

The commissioner shall provide written documentation describing the basis for this determination.

15. **327 IAC 19-7-1(c)(6)**
Delete “Indiana board of registration of soil sciences” and substitute “**Indiana board of registration for soil scientists**”.
16. **327 IAC 19-7-1(c)(8)**
Delete “including” and substitute “which includes”.
Delete “listed” and substitute “described”.
Delete “IC 13-15-8” and substitute “**IC 13-15-8-2**”.
17. **327 IAC 19-7-1(c)**
Add a new subdivision (13) to read as follows:
(13) Copies of all land use agreements as described in 327 IAC 19-14-2(b).
18. **327 IAC 19-7-1(d)**
Revise subsection (d) to read as follows:
(d) Existing CFOs that are expanding must also provide a certification on a form provided by the department that enough acreage exists for land application. This certification must include any information provided to demonstrate that a smaller amount of acreage can be used under 327 IAC 19-14-2(c). This certification must be submitted in writing to the department.
19. **327 IAC 19-7-1(e)**
Delete subsection (e).
20. **327 IAC 19-7-3(a)**
Following “proposed structures, including the” insert “most recent construction”.
Add a new subdivision (10) to read as follows:
(10) Any residence.
21. **327 IAC 19-7-3(e)**
Delete “public roads” and substitute “**true north**”.
22. **327 IAC 19-7-5(c)**
Delete “including nitrogen, phosphorus, potassium and lime recommendations”.
23. **327 IAC 19-7-5(e)**
Following “separate and distinct storage” insert “facilities”.
Following “taken from each” insert “**unique production system**”.
24. **327 IAC 19-7-6**

Revise subsection (b) to read as follows:

(b) Mortality composting sites must meet all of the following criteria:

(1) Be constructed and operated:

(A) to prevent:

(i) leaching, either through the use of earthen compaction or a concrete pad; and

(ii) run-on and runoff of storm water; and

(B) in accordance with IC 15-17-11.

(2) Comply with setbacks listed in 327 IAC 19-12-3.

25. 327 IAC 19-8-2(b)

Redesignate subsection (b) as subsection (c) and revise to read as follows:

(c) The approval renewal required under subsection (b) must be submitted at least thirty (30) days prior to the expiration of the approval. Approval renewals shall be issued for a fixed term not to exceed five (5) years from when the previous permit expires.

26. 327 IAC 19-8-2(c)

Redesignate subsection (c) as subsection (b).

27. 327 IAC 19-8-4(a)

Revise subsection (a) to read as follows:

Sec. 4. (a) The commissioner may deny an approval application or place conditions on an approval if:

(1) the CFO is, at the time of the approval application or approval decision, not in compliance with:

(A) all current approval conditions;

(B) IC 13-18; or

(C) this title;

(2) the application is not on a form provided by the department or does not meet the requirements of this article; or

(3) a complete application has not been submitted after receipt of two (2) notices of the same deficiency on a new or renewal application;

or as provided in IC 13-18-10-2.1.

28. 327 IAC 19-8-7(a)

Following "completed on forms provided" insert "**or approved**".

29. 327 IAC 19-9-1(b)

In subdivision (8), delete "327 IAC 19-13-1(d)" and substitute "327 IAC 19-13-1(f)".

Revise subdivision (10) to read as follows:

(10) Updated calculation of minimum acreage required to meet land application requirements under 327 IAC 19-14-2(a), and copies of all land use agreements described in 327 IAC 19-14-2(b).

Delete subdivision (17).

Redesignate subdivision (18) as subdivision (17); following "maintenance activities on" insert "**liquid**".

Renumber the remaining subdivisions.

30. 327 IAC 19-10-1

Revise section 1 to read as follows:

327 IAC 19-10-1 Ground water monitoring

Authority: IC 13-13-5-1; IC 13-15-1-2; IC 13-15-2-1

Affected: IC 13-18-10

Sec. 1. (a) Ground water monitoring may be required when the commissioner makes a determination that the monitoring is required to protect human health and the environment. The commissioner shall make a written determination describing the basis for the need for ground water monitoring based on information provided about any of the following:

- (1)** Proximity of ground water aquifer to waste management systems.
- (2)** Soil types located at and around the proposed waste management systems.
- (3)** Site-specific factors at the location of the proposed waste management system that may elevate the potential for contamination of the ground water aquifer.

(b) The commissioner may request additional information from an owner/operator to complete the written determination in subsection (a).

(c) All CFOs required to conduct ground water monitoring must comply with the requirements of this section.

(d) Owners/operators of a manure storage facility shall develop and follow a written ground water monitoring plan. This plan must:

- (1)** be approved by the department;
- (2)** be kept in the operating record; and
- (3)** include:

(A) at least the following monitoring parameters:

- (i)** field pH;
- (ii)** field specific conductance;
- (iii)** nitrates;
- (iv)** chloride;
- (v)** fecal coliform bacteria;
- (vi)** sulfate; and
- (vii)** total dissolved solids;

(B) monitoring frequency;

(C) sample collection method and identification;

(D) sample preservation and shipment, including field quality control;

(E) analytical procedures, including:

- (i)** method detection limits; and
- (ii)** practical quantitation limits;

(F) chain of custody control; and

(G) a description of how the owner/operator shall determine whether there is a statistically significant increase over background values for each parameter monitored, with the exception of field pH and field specific conductance. The owner/operator shall make these statistical determinations each time the owner/operator collects samples.

(e) If the owner/operator determines under subsection (d)(3)(G) that there is a statistically significant increase for parameters at any monitoring device, the

owner/operator shall notify the commissioner of this finding in writing within fourteen (14) days. The notification must indicate what parameters have shown statistically significant increases over background levels. The department may then require corrective action.

(f) Owners/operators must submit the results of ground water monitoring to the department within sixty (60) days of sampling.

(g) Required monitoring must be conducted throughout the active life of the storage facility. Ground water monitoring may be extended beyond the active life of the manure storage facility if a corrective action program is being conducted at the facility. (*Water Pollution Control Board; 327 IAC 19-10-1*)

31. 327 IAC 19-11-1(a)

Delete "pollution prevention plan".

At the end of the subsection insert "and 40 CFR 122.42(e)(1) through 40 CFR 122.42(e)(2)".

32. 327 IAC 19-11-2(a)

Revise subsection (a) to read as follows:

Sec. 2. (a) When evaluating storm water management, CFOs must consider the following:

(1) All activities and significant materials that may reasonably be expected to add significant amounts of pollutants to storm water draining from the facility.

(2) The potential pollutant sources from the following:

(A) Immediate access roads and rail lines at the CFO used or traveled by carriers of raw materials, waste material, or byproducts used or created by the facility.

(B) Refuse sites.

(C) Sites used for the storage and maintenance of material handling equipment.

(D) Shipping and receiving areas.

(E) Paved, dirt, or gravel parking areas for storage of vehicles to be maintained.

(F) Materials that are treated, stored, or disposed of in a manner to allow exposure to storm water where that exposure may release contaminants into the storm water.

(G) The method and location of on-site storage or disposal of significant materials.

(3) The location of existing structural and nonstructural control measures to reduce pollutants in storm water runoff.

(4) Materials management practices employed to minimize contact of materials with storm water runoff.

33. 327 IAC 19-11-2(b)

Revise subsection (b) to read as follows:

(b) The following storm water management practices must be implemented:

(1) Good housekeeping. All areas that may contribute pollutants to storm water discharges should be maintained in a clean, orderly manner.

(2) Preventative maintenance. A preventative maintenance program including timely inspection and maintenance schedule of storm water management devices.
(3) Sediment and erosion control. Identify areas that, due to topography, activities, or other factors, have a high potential for significant soil erosion and identify structural, vegetative, and initiate stabilization measures to limit erosion.
(4) Management of storm water runoff. Practices (other than those that control the generation or source or sources of pollutants) used to divert, infiltrate, reuse, or otherwise manage storm water runoff so as to reduce pollutants in storm water discharges from the site.

34. **327 IAC 19-12-3**

Delete subsection (a) and renumber the remaining subsections.

In renumbered clause (a)(2)(A), delete “waters of the state” and insert “**water**”.

In renumbered subsection (b), delete “solids” and substitute “**solid manure**”.

In renumbered subsection (b), delete “subsection (b)(2)” and substitute “**subdivision (a)(2)**”.

At the end of renumbered subsection (b) insert “**but must comply with the setbacks in subdivisions (a)(1) and (a)(3) through (a)(4)**”.

35. **327 IAC 19-12-4(d)**

Revise subsection (d) to read as follows:

(d) All liquid manure storage facilities must be constructed according to the Indiana NRCS Conservation Practice Standard Code 313: Waste Storage Facility, September 2005. Construction of all liquid manure storage facilities approved after the effective date of this article must be certified upon completion by a registered professional engineer on a form provided by the department. The engineer’s certification must be kept in the operating record and submitted with the affidavit required by subsection (s).

36. **327 IAC 19-12-4(e)**

Following “according to” insert “**either of**”.

Following “MWPS-36: Rectangular Concrete Manure Storages,” insert “**Second Edition**”.

Following “2005*” delete “; or”.

37. **327 IAC 19-12-4(f)**

Delete “In addition to subsection (d),”.

Delete “facilities” and substitute “**lagoons utilized for treatment**”.

38. **327 IAC 19-12-4(g)**

Delete “solids” and insert “**solid manure**”.

39. **327 IAC 19-12-4(i)**

Delete “Indiana NRCS Conservation Practice Standard Code 516: Pipeline, November 2009” and substitute “**Indiana NRCS Conservation Practice Standard Code 634: Waste Transfer, October 2010**”.

40. **327 IAC 19-12-4(k)(3)**

Revise the subdivision to read as follows:

(3) Tanks used to store any objectionable or hazardous substances must be cleaned to remove any traces of the other substances prior to addition of manure to the tank.

41. 327 IAC 19-12-4(p)

Following “blocked or rerouted” insert “**in accordance with any applicable local approval requirements**”.

42. 327 IAC 19-12-5(b)

In the second sentence following “Except” insert “**for clay liners described**”.
Following “must meet” insert “**any of**”.

43. 327 IAC 19-13-1(b)

Delete “liquid and solid”.

44. 327 IAC 19-13-2

Revise the section to read as follows:

327 IAC 19-13-2 Digesters and other energy recovery systems

Authority: IC 13-14-8-1; IC 13-18-10-4

Affected: IC 13-11-2; IC 13-14-12; IC 13-18; IC 13-30

Sec. 2. Any manure digester or energy recovery system located at a CFO or CAFO that receives only biomass, as defined in IC 13-11-2-16.6, must be approved as a waste management system in accordance with IC 13-20-10.5. (*Water Pollution Control Board; 327 IAC 19-13-2*)

45. 327 IAC 19-14-2(b)

Revise subsection (b) to read as follows:

(b) Any acreage identified as part of the minimum required acreage for the application of manure, litter, or process wastewater that is not owned by the owner or operator of the CFO must be documented in the operating record by land use agreements signed by the property owners on whose property the manure, litter, or process wastewater will or may be applied. If the property is held under a lease or managed by someone other than the property owner, such person in responsible control of the property with authority to approve the application of manure on the land may sign the land use agreement. The land use agreement shall specify the location of each parcel of land upon which manure may be applied and the available acreage on each parcel after calculation of setbacks.

46. 327 IAC 19-14-3(b)

Revise subsection (b) to read as follows:

(b) The application rate of nitrogen (N) must not exceed the N requirements based on the recommendations in:

(1) Purdue University Cooperative Extension Service publication ID-101: Animal Manure as a Plant Nutrient Resource, February 2001, available from the Cooperative Extension Service, Purdue University, West Lafayette, Indiana 47907; or

(2) Tri-State Fertilizer Recommendations for Corn, Soybeans, Wheat and Alfalfa, Extension Bulletin E-2567 (New), July 1995, available from the Cooperative Extension Service, Purdue University, West Lafayette, Indiana 47907; for current or planned crops of the upcoming growing season as documented in the operating record. Minimum N loss estimates must be used unless otherwise justified. This justification must be kept in the operating record.

47. **327 IAC 19-14-3(c)**

Delete “April 1992” and substitute “**March 2008**”.

Delete “<http://www.wsi.nrcs.usda.gov/products/w2q/awm/handbk.html>” and substitute “<http://policy.nrcs.usda.gov/OpenNonWebContent.aspx?content=17768.wba>”.

48. **327 IAC 19-14-3(d)(1)**

Following “Large CAFOs as defined in 40 CFR 122.23(b)” insert “**that were approved for initial construction after February 13, 2003**”.

49. **327 IAC 19-14-3(d), Table 1**

Revise the title of Table 1 to read as follows:

**PHOSPHORUS APPLICATION RATES FOR LARGE CAFOS APPROVED FOR INITIAL
CONSTRUCTION AFTER FEBRUARY 13, 2003 AND CFOS APPROVED FOR INITIAL
CONSTRUCTION AFTER THE EFFECTIVE DATE OF THIS ARTICLE**

50. **327 IAC 19-14-3(e)**

Revise subsection (e) to read as follows:

**(e) Beginning with the effective date of this article, CFOs and CAFOs not listed in
subsection (d) must comply with the phosphorus application rates in Table 2:**

Table 2.

PHOSPHORUS APPLICATION RATES FOR ALL OTHER CFOS AND CAFOS

Soil test level (ppm)	YEAR ¹			
	2012-2013	2014-2015	2016-2017	2018+
0-50	N based	N based	N based	N based
51-100	1.5 × P crop removal	1.5 × P crop removal	1.5 × P crop removal	1.5 × P crop removal
101-200	1.0 × P crop removal	1.0 × P crop removal	1.0 × P crop removal	1.0 × P crop removal
201-250	0.9 × P crop removal	0.75 × P crop removal	0.75 × P crop removal	0
251-275	0.9 × P crop removal	0.75 × P crop removal	0.5 × P crop removal	0
276-300	0.9 × P crop removal	0.75 × P crop removal	0.25 × P crop removal	0
301-350	0.7 × P crop removal	0.5 × P crop removal	0	0
351-400	0.7 × P crop removal	0.25 × P crop removal	0	0
401+	0	0	0	0

¹ Multiple years of phosphorus may be applied as long as the net average of phosphorus does not exceed the amounts indicated in Table 1.

51. **327 IAC 19-14-3(f)**

Following “The following” insert “**land application**”.

52. **327 IAC 19-14-4(b)**

In subdivision (1), delete “waters of the state” and substitute “**water**”.

Revise subdivision (3) to read as follows:

(3) on any standing water or waterway; or

Add a new subdivision (4) to read as follows:

(4) in any flood plain for more than seventy two (72) hours.

53. 327 IAC 19-14-4(c)

Following “at the CFO overnight” insert “**for more than twenty four (24) hours**”.

54. 327 IAC 19-4-4(e)

At the end of subsection (e) insert “**Injection or incorporation of manure into the soil on the same day is not prohibited.**”

55. 327 IAC 19-14-4(f)

Revise subsection (f) to read as follows:

(f) CFOs not described in subsection (e) may surface apply manure on frozen or snow covered ground in accordance with subsections (g) through (i). Injection or incorporation of manure into the soil on the same day is not prohibited.

56. 327 IAC 19-14-4(g)

At the end of the subsection, following “an emergency”, delete “for purposes of this section”.

57. 327 IAC 19-14-4(h)

Delete “liquid”.

58. 327 IAC 19-14-4(h)(3)(C)

Following “Application” delete “cannot” and substitute “**may not**”.

59. 327 IAC 19-14-4(i)

Revise subsection (i) to read as follows:

(i) For a CFO that is not a large CAFO with one hundred twenty (120) days or less of approved storage capacity, the commissioner may authorize application of manure to frozen or snow-covered ground on a case-by-case basis. The CFO must:

(1) provide proof of available storage capacity to the commissioner; and

(2) comply with subdivision (h)(3).

This authorization terminates when a discharge to waters of the state or a water quality violation is documented.

60. 327 IAC 19-14-4(j)

Delete “Liquid or solid”.

61. 327 IAC 19-14-5(a)

Delete “liquid” and “expressed in inches per hour”.

62. 327 IAC 19-14-6(a)

In clause (a)(3)(A) and clause (a)(4)(A), delete “waters of the state” and substitute “**water**”.

63. 327 IAC 19-14-7

Delete subsections (d) and (f); renumber the remaining subsections.

Revise renumbered subsection (d) to read as follows:

(d) If a manure distribution program is used, IDEM may allow for a waiver of some or all of a facility's total land application acreage requirements based on submittal of:

(1) the documentation as described in subsections (b) and (c) from the previous three (3) years showing the amount of manure produced and marketed at the facility; or

(2) contracts for the entire approval term for marketing the projected amount of manure produced at the facility.

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